# The President's Address:

Delivered before the American Gynecological Society, at Washington, D. C., September 23, 1885.

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*With the Author's Compliments.*

# THE PRESIDENT'S ANNUAL ADDRESS: TWO RARE CASES IN ABDOMINAL SURGERY.

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GENTLEMEN, CONFRÈRES OF THE AMERICAN GYNECOLOGICAL SOCIETY: In the profession of medicine, above all, perhaps, *facts are the things that teach.* And the intellect, the reason, is the test of truth. The senses are the servants, who wait upon the mind, which sits as a judge deciding upon impressions, and detecting the true from the false. The judge, who is to discover the truth of complex medical facts and phenomena, must be no ignorant, prejudiced partisan, biased by preconceived opinions. He must be richly endowed and largely stored with the wisdom of the past and the rapidly accumulating information of the present, capable of patient induction, and quick to detect the relations between seemingly dissimilar things.

Few minds, it may be said, can attain this standard of qualification for the discovery of truth. But if I seem to describe the attributes of genius, or rare qualities which can be acquired or improved only by a felicitous combination of circumstances, and that culture which presumes the possession of ample means and large opportunities—qualities illustrated by high achievements distinguishing the gifted few—on the other hand it is equally to be remembered that valuable observations may be made, and valuable facts gathered, and valuable truths discovered or illustrated, and enforced by all. It is not a large number of cases carelessly observed and committed only to the treacherous custody of the mem-

ory, but the comparatively few that are carefully observed, well studied, and honestly recorded, that contribute to establish the great principles of scientific medicine. Truth should ever be sought in the clear light of patient and unbiased observations, and we should listen attentively to the voice of Nature, whose testimony, if properly interpreted, is ever to be trusted. It is thus that many of the pictures of disease drawn by the ancient masters—Aristæus, Hippocrates, and Sydenham—even yet, through the dim vista of retreating ages, are life-like in the fresh-glowing colors of truth, and are distorted or become unnatural only when touched by the shadowy hues of conjecture.

In order that the teachings of Nature, intelligently observed, may be duly realized and perpetuated, I have ever thought that, in the report of cases, it is essential that failures as well as successes be included, as the former often teach more than the latter, and both are equally important for the elucidation of truth. The student of military science who should confine his studies to the manœuvres of successful battles, and avert his attention from the errors that have led to disaster when victory might have been won, would lose half of the lessons taught by experience, and all of the wisdom that is born of misfortune. And the medical man who, through vanity or fear, records only his triumphs and omits his failures, their causes and results, deprives his fellows of as much knowledge as he bestows. I admire and honor the manly way in which Lawson Tait, of splendid genius and iron nerve, spoke of his operation for the relief of bleeding myomas before the recent meeting of the British Medical Association at Cardiff:[1]

"Adverse critics have been delighted to rake up my early cases in which the mortality was nearly 25 per cent.; but I need not say that, as I originated this proceeding, I had to bear the burden of the blunders inseparable from ignorance—blunders which have helped me not only to mend my own ways, but also to mend the ways of those who came after me,

[1] *Brit. Med. Jour.*, August 15, 1885, p. 288.

and who have forgotten to credit me with the better results which my misfortunes provided for them."

Impressed with these views, and because there is too often a disposition on the part of many to suppress errors of diagnosis and unfortunate results, I reported to this Society, just five years ago, three fatal cases of rupture of the uterus, and extrusion of the fetus into the abdominal cavity, with laparotomy. All occurred in the practice of others. The literature of the subject was scanty, widely diffused, and, when I was suddenly called to operate, I had little light to guide me, as it seldom falls to the lot of one person to perform laparotomy, under such circumstances, as many times. In looking back now at these cases in the light of the experience then acquired, it seems to me that the life of one might, with a high degree of certainty, have been saved; and that the life of another might probably have been saved. The third and last case, when I was called in to operate, was already *in extremis*, and the operation was done as a *dernier ressort* and to relieve intense suffering. But had laparotomy been promptly done when the accident occurred, the unfortunate woman might almost certainly have been rescued.

To-day I propose to present the histories of two rare cases of exceptional interest and of great importance, in which I was so completely baffled in diagnosis that I declined an attempt to make one. And I trust that the lessons they teach may be useful to others, as I fain hope they may be to myself.

Case I.—Sarah Hawkins, negress, aged twenty-four years, married, presented herself at the dispensary attached to my service in the University of Maryland Hospital on April 20, 1882. She stated to my chief of clinic, Dr. W. P. Chunn, that menstruation first occurred at the age of fourteen, and had always been regular and normal; that she was the mother of five children, and had never had a miscarriage. Her last child was born two months before, and, some days afterward, she noticed an enlargement of the lower portion of the abdomen, which gradually extended in the middle line up to the umbili-

cus, attended by bearing-down pains and frequent micturition. Upon examination by Dr. Chunn, fluctuation was found to be well marked all over the abdomen, with decided resonance about the umbilical region, and with dullness and bulging in both flanks. Six weeks after this date she came to the dispensary again, and Dr. Chunn found that the umbilical resonance had entirely disappeared, being supplanted by dullness on percussion, and the umbilicus itself was projected forward in the form and shape of a spherical tumor. Nearly two weeks after this last examination by Dr. Chunn, he brought her before my clinical class on clinic day, and I saw her for the first time. Noticing at a glance that she was ill, I made a very careful examination. The temperature was 102½° Fahr., pulse 120, and respiration 32 to the minute; auscultation and percussion quickly revealed the unmistakable signs of pleurisy; dullness on percussion on the left side up to the supra-spinal fossa, feeble respiration over the base, a decided bronchovesicular respiration near the upper limit of dullness, and a well-marked egophonic twang to the voice. The abdomen was enlarged to about the size of a seven months' pregnancy, was remarkably protuberant in the center, and one would say, at a glance, it was, in all probability, an ovarian cystoma. There were complete dullness over the entire tumor, which remained unchanged in any position, and quick and equal fluctuation in every direction. The abdominal wall was harder and more resistant than natural, but in no place was this better marked than another, and there was no evidence whatever of a solid tumor. In short, the signs of a simple unilocular cyst seemed perfectly developed. Examined *per vaginam*, the uterus was well in front of the tumor; the sound entered 2¾ inches, and was uninfluenced by an effort to move the tumor, which seemed unusually tense and elastic.

The question, then, was, *What is it?* I will not discuss all the conditions which might possibly produce the phenomena in question, but only those which usually and instinctively suggest themselves.

1. Was it an *ovarian cystoma?* The first objection to that view of the case is the extreme infrequency of that

affection in the negro race. Indeed, although my entire professional life of forty years has been passed in communities in which negroes exist in large numbers, and for the past eighteen years many hundreds have attended my gynecological clinics, I have yet to see an ovarian cystoma in the negro race. The testimony of the late Dr. W. L. Atlee was nearly similar. He wrote: "I may state as a remarkable fact that, out of two hundred and fifty-five operations performed by me for the removal of the ovary, only one was performed on the negro, and that a mulatto, notwithstanding I have been frequently consulted by that class for abdominal and pelvic tumors. So satisfied am I of the predominance of fibroid tumors in the negro that, when consulted, I never anticipate finding an ovarian tumor."[1]

Again, the growth of an ovarian tumor is usually slow. Although Lawson Tait affirms,[2] in speaking of ovarian tumors, that "the rate of increase gives no guide," and, to prove his statement, cites an instance in which he removed a multilocular tumor of great size from a patient aged sixty-six, "which had grown in four months"; still, even if it be granted that the history of this wonderful case was not misleading, the general fact remains that it usually requires from one and a half to two years for an ovarian tumor to reach the size of the pregnant uterus. We all know how often patients tell us that they have only recently become aware of the existence of fibroid tumors of the uterus, and, indeed, of many other morbid conditions, when universal experience nullifies the idea of recent occurrence.

For these reasons chiefly I rejected the diagnosis of ovarian cystoma in the case in question.

2. *Was it a fibro-cystoma of the uterus?* The first question to be considered is, What is the *relative frequency* of this affection and of ovarian cystomata? For the infrequency of a disease is a matter of great importance in questions of difficult diagnosis; and, as Chomel has well insisted, when a group of symptoms belongs to two affections, one of which

[1] *Ovarian Tumors*, p. 192. [2] *Diseases of the Ovaries*, fourth ed., p. 189.

is very frequent and the other as rare, the physician will, and naturally should, be led to apply these symptoms to the most common disease.[1]

Fibro-cysts of the uterus seem much more common in this country than abroad. The lamented Peaslee, writing in 1872, says:[2] "I have myself met with ten cases in the last two years, and have seen not less than fifty since my first operation of ovariotomy in 1850." Dr. Emmet states that, in former years, he saw an unusual number of fibro-cystic tumors of the uterus, but that now, from more wide-spread knowledge of these growths, he sees comparatively few cases.[3] Dr. Thomas's experience in regard to uterine fibro-cysts seems to have been small. He says:[4] "I had recently under my care two very large tumors supposed to be of this kind." And I do not find in his work[5] that Dr. Byford had seen a case. Dr. Atlee has recorded the history of only five fibro-cystic uterine tumors, although he did three hundred and seventy-eight ovariotomies. On the other side, Lawson Tait, writing in 1882, says:[6] "The fibro-cystic tumor of the uterus is an extremely rare affection—so rare that, until four months ago, I had never seen a case"; and, in spite of his enormous experience and wonderful skill, he mistook that for a unilocular parovarian cyst, and removed it with a fatal result. In respect of Sir Spencer Wells's unequaled experience, Dr. Peaslee says: "He assures me that he meets with not more than one fibro-cyst for fifty ovarian cysts." Perhaps that is his reason for not alluding to the subject in the chapter on *Differential Diagnosis of Ovarian Tumors* in his recent work,[7] although he has done 1,139 ovariotomies. Dr. Thomas Keith made his first mistake, in diagnosis of 194 operations,[8]

[1] *Elements of General Pathology*, p. 337.
[2] *Ovarian Tumors*, p. 106.
[3] *Gynecology*, third ed., p. 678.
[4] *Diseases of Women*, fifth ed., p. 557.
[5] *Diseases and Accidents incident to Women*, third ed., 1881.
[6] *Op. cit.*, fourth ed., p. 215.
[7] *Diagnosis and Surgical Treatment of Abdominal Tumors*, 1885.
[8] *Contributions to the Surgical Treatment of Tumors of the Abdomen*, p. 25.

when he mistook a case of fibrous cystic tumor of the uterus for an ovarian tumor; which attests at once his unrivaled accuracy in diagnosis and the infrequency of uterine fibro-cysts abroad.

It is clear, then, from the evidence adduced, that, in respect of frequency of occurrence, whether in this country or abroad, a fibro-cystoma of the uterus, in comparison with an ovarian cystoma, is a very rare disease. This is all the more remarkable in the negro race, among whom fibroids of the uterus are met with every day; and uterine fibro-cysts, in certainly the majority of cases, are merely extra-uterine fibroids that have become softened. I have only once seen a uterine fibro-cyst in a negress, aged thirty-two years, which was filled with pus, and removed with a fatal result.

But however important as an element of differential diagnosis infrequency of occurrence of fibro-cysts of the uterus may be in the white race in a doubtful case, it avails little in the negro race, among whom ovarian cystomata are almost unknown. Still, as ovarian and fibro-cystic uterine tumors are almost equally among the rarest of all rare things in negroes, that fact alone should rather lead the mind away from the diagnosis of these affections among them in quest of others to account for the phenomena in question. But, before that is done, other elements of diagnosis should be utilized. What influence has *age* in the solution of the problem in hand? In a remarkable paper upon the *Diagnosis of Ovarian Tumors from Fibro-cystic Tumors of the Uterus*, by our eminent Fellow, Dr. Charles Carroll Lee,[1] and which has been so generally quoted both at home and abroad, he gives the histories of nineteen cases, derived from various sources. In eighteen the age is stated, and there were only two under 34 years; generally they were from 40 to 50; one was 26, and one 27. Besides these I have searched out and added ten others—five reported by Dr. W. L. Atlee, aged, respectively, 36, 40, 40, 56, and 42 years; two by Dr. Thomas Keith, 52 and 28 years; one by Sir Spencer

[1] *New York Medical Journal*, vol. xiv, p. 449.

Wells,[1] aged 39 years, mistaken for a multilocular ovarian cyst; one by Dr. Hunter McGuire,[2] aged 24—a negress; and one by myself, aged 32 years, also a negress. Thus, of twenty-eight cases of fibro-cysts of the uterus, only four were under 34 years. In view of these facts, it seems to me that the age of the patient is a matter of considerable importance in the differential diagnosis of two affections often so confessedly difficult as to elude the skill of the most accurate experts, however matured and sharpened by amplest experience. Of the nineteen cases of fibro-cystic tumors of the uterus collected and analyzed by Dr. Lee, a correct diagnosis was made before operation in only one; all the rest were mistaken for ovarian cysts. So far, then, as *age* lent aid to diagnosis, my case, twenty-four years old, was probably not a fibro-cyst of the uterus; still, Dr. McGuire's case was of the same age and of the same race—a fact well known to me at the time.

The *rate of growth* is always to be considered, and there can be no question that uterine fibro-cysts, like hard fibroid tumors, usually grow much more slowly than ovarian cysts; still, we have the authority of W. L. Atlee[3] for the statement that the growth of the former may be as rapid as that of the latter; and Peaslee[4] makes the same assertion. In all such affections, however, the *rate of increase* must be received with caution and reserve; and the fact that they may remain long unrecognized depreciates the value of this element of differential diagnosis. Hence I was not disposed to attach great importance to the statement of my patient, of very limited intelligence, that the growth, whatever it might be, did not date back farther than three months and a half.

It is generally taught that, in making a diagnosis between a uterine fibro-cyst and an ovarian cyst, we must remember that in the former the uterine cavity is generally enlarged,

[1] *British Med. Jour.*, 1878, vol. ii, p. 865.
[2] *Philadelphia Med. Times*, vol. ii, p. 244.
[3] *Op. cit.*, p. 262. [4] *Op. cit.*, p. 107.

much exceeds two and a half inches in length, and that menorrhagia and metrorrhagia are generally observed. But the exceptions are not infrequent. On the 3d of July, 1880, I successfully performed double ovariotomy on a lady, twenty-eight years of age, who had suffered from profuse menorrhagia and metrorrhagia for ten years, and who had no fibroids or other disease of the uterus. She had metrorrhagia when the operation was done; the hemorrhage promptly ceased, and, two years afterward, she had never bled from the uterus again. Hear the testimony of our eminent Honorary Fellow, Dr. George Granville Bantock. In writing about hysterectomy he states:[1] "If any one were asked to name the most characteristic symptom of uterine fibroid, he would probably answer 'hemorrhage.' But it is a remarkable fact that in only four of twenty-one cases in which I have operated was this a prominent symptom at the time of operation." There are so many affections of the uterus which may co-exist with an ovarian cystoma and produce profuse uterine hemorrhages, and, on the other hand, uterine fibro-cysts are so generally extra-uterine, with slight involvement of the uterine wall, that the presence or absence of uterine hemorrhages ought not, in a doubtful differential diagnosis, to receive great weight. And this is all the more apparent when we consider that diseases of the ovaries themselves produce copious uterine hemorrhages. Thus, a few years back, I lost a patient in the Maryland University Hospital from incessant metrorrhagia which nothing could control; and the *autopsy* revealed the existence of carcinomatous degeneration of the right ovary as the sole lesion. On the 21st of May, 1884, I performed oöphorectomy on a married and sterile lady, aged twenty-five, who had no uterine disease, and had long suffered from metrorrhagia. Both ovaries were nearly three times their normal size, hard, nodulated, and undergoing cystic degeneration. And Lawson Tait has emphasized the close association of uncontrollable menorrhagia with small cystic ovaries.[2]

[1] *British Med. Jour.*, August 26, 1882, p. 364. [2] *Op. cit.*, p. 190.

In the case which forms the text of these remarks there were no menstrual irregularities whatever. Having rejected the diagnosis of uterine fibro-cyst, I next considered—

3. *Was it a parovarian cyst?* Dr. Atlee says:[1]

"There is no condition of the female abdomen that imitates ovarian dropsy as much as this. It may be safely asserted that its external appearances, when the disease is fully developed, are identical with those of unilocular ovarian dropsy at a similar stage of development."

My case, like a parovarian cyst, presented to palpation a uniform and rapid wave in every diameter of the tumor; and, according to Peaslee, a parovarian cyst "occurs most usually in young women," and my case was twenty-four years of age. On the other hand, parovarian cysts are usually of very slow development, and generally so flaccid that, although they may fill the abdomen and even reach to the sternum, they may be compressed to the umbilicus, while an ovarian cyst is hard and incompressible—clinical data especially emphasized by Goodell,[2] who affirms that exceptions to this rule are very rare; that is, either a tense parovarian cyst or a flaccid ovarian one. I have seen only two well-marked exceptions—a tense parovarian cyst in the practice of Dr. Alan P. Smith, of Baltimore, and quite recently, in my own practice, a large flaccid ovarian cyst, of which I will speak farther on. In the case I am discussing, as already stated, the cyst was hard, tense, and elastic. In respect to the value of *age* as an element of diagnosis, Dr. Atlee's experience does not seem to bear out Dr. Peaslee's statement. Of seven cases reported by Atlee, the ages were, respectively, 25, two 29, 30, 40, and two 44 years old. *Slowness of development* is more characteristic. Goodell removed a parovarian cyst which had existed ten years, and Lawson Tait one which had been in existence more than ten years. Still, these cysts occasionally grow rapidly. Tait says that he has "removed a very large parovarian cyst, when the

[1] *Op. cit.*, p. 107. [2] *Amer. Jour. of Obstet.*, vol. xvii, p. 391.

fact was fully ascertained that the tumor grew in less than six weeks"; and in another place (presumably, from the connection, speaking of these cysts) that he has "removed two unilocular tumors, one of which grew so as to completely distend the abdomen in seven weeks, and another, almost as large, which had not been noticed for more than five weeks."[1] But parovarian cysts are comparatively rare, do not seriously affect the general health, and almost always impart to the palpating hand the sensation of a very *thin* liquid. And I readily excluded a parovarian cyst in my case.

4. *Was it a case of simple ascites?* When I saw the case, pure ascites was out of the question. The lines and limits of dullness and fluctuation corresponded exactly in all positions; the percussion-note was resonant at the sides over the ascending and descending colon; and the abdomen was not sufficiently distended to prevent the buoyant intestines from floating to the surface, as occurs exceptionally in excessively large accumulations of free fluid in the peritoneal cavity, and thus mimicking encysted fluid.

5, and lastly. Was it a case of so-called *encysted dropsy of the peritoneum*, the result of simple peritonitis? This is admitted on all hands to be an extremely rare affection, and, according to Peaslee, it occurs more seldom in women than in men. The intestines may be strapped down to the back by adhesions and large deposits of lymph, or held down by a thickened and shortened omentum, and plastic exudations so disposed as to form a cyst-like cavity in which serum is imprisoned; so that the areas of dullness and resonance remain the same on changing the patient's position. In October, 1875, I was kindly invited by Prof. Erich, of Baltimore, to witness an ovariotomy in a negress, aged twenty, who was supposed to present all the physical signs of a large ovarian cyst, and the diagnosis had been sustained by the character of the fluid drawn by tapping, which was positively stated, by an experienced microscopist, to reveal the presence of the so-

[1] *Op. cit.*, pp. 167 and 189.

called ovarian cell.[1] It turned out to be, however, "encysted ascites simulating ovarian dropsy," and was followed by an unfortunate result. Dr. J. Ewing Mears has reported a similar case, aged forty, which he mistook for a multilocular cyst of the ovary, and for which he operated with a fortunate issue.[2] But, according to Peaslee and Barnes,[3] in encysted dropsy of the peritoneum fluctuation is weak and limited; the abdomen is not prominent, but flat, at points even depressed; the health is not bad, and the increase of the affection slow, while in my case all this was reversed. In the cases in question, however, the inflammatory exudations in the abdominal cavity are attended, especially in their earlier stages, by symptoms of constitutional disturbance much more acute and grave than those which usually herald the earlier periods of ovarian cystomata, which, according to Atlee, only exceptionally exhibit, then, violent symptoms. But, as my case was attended with acute pleurisy and marked constitutional disturbance, and the abdominal enlargement revealed no tenderness upon pressure, there seemed no reason why the acuteness of the phenomena present should be referred to encysted dropsy of the peritoneum, and it was excluded.

And now, gentlemen, those of you who may have honored me thus far in listening to this address are ready, I fancy, to say: "You have been speaking long enough already, if not too long; why do you not tell us at once what the thing was?" Well, I will anticipate enough to say it was not any one of the morbid states I have been discussing.

The case was transferred to my gynecological wards in the hospital, and on the 20th of June, having thought it over, I considered what was best to be done. Would it be best to aspirate the pleuritic effusion, and thus relieve the oppressed breathing? In a bad case of multilocular ovarian cystoma I had given prompt relief, August 15, 1878, to a lady aged fifty,

[1] *Boston Med. and Surg. Jour.*, vol. ciii, p. 318.
[2] *Trans. College Phys.*, Philadelphia, vol. i, p. 171.
[3] *Med. and Surg. Dis. of Women*, second edition, p. 366.

by aspirating the left pleural sac, which was filled to repletion by an acute pleuritic effusion, and which did not return. In this case, however, I determined to aspirate the abdominal cyst, as I was anxious to ascertain the character of the contained fluid. This I preferred to making an exploratory incision, which might lead, of necessity, to a completed operation, for which, should it be subsequently required, I hoped to have the poor woman in better condition. And this I proceeded to do, with every antiseptic precaution. As the fluid, which was of a light straw-color, was pumped into a large pitcher, it began to coagulate as speedily as blood ; and, an hour afterward, I never saw a firmer clot and more abundant serum in the by-gone days when medical men were not afraid to bleed. After all the fluid was removed, large, hard masses were easily felt through the abdominal wall, resembling those felt after tapping in the walls of a multilocular ovarian cyst. According to Dr. Atlee's teaching, as we all know, I had before me a fibro-cyst of the uterus. He said :[1]

"I consider the fluid removed from a fibro-cystic uterine tumor to be blood *minus* the corpuscles, or true *liquor sanguinis*, which rapidly coagulates on exposure to the atmosphere, and after a reasonable time separates into fibrin and serum. So far as my experience goes, I have met with no other fluid, removed from the abdominal cavity, that undergoes such changes ; nor have I met with any other form of tumor that furnishes such a fluid. It may, therefore, be pronounced not only diagnostic, but pathognomonic."

But my experience had furnished me two cases before this which clearly seemed to negative Dr. Atlee's experience. About four years before this date I had a case under care in which I was greatly puzzled in making the diagnosis between an ovarian cyst and a fibro-cystic tumor of the uterus. I aspirated the tumor and drew off nearly two pints of a reddish fluid (all that would flow through the tube) which did not coagulate during the twenty-eight days that I kept a portion

[1] *Op. cit.*, p. 289.

of it in a bottle; and, relying upon Dr. Atlee's test of the speedy coagulability of fibro-cystic fluid, I decided in favor of ovarian cystoma. But, when I subsequently opened the abdomen, I encountered a large fibroid of the uterus growing from the right side of the organ by a pedicle about the size of a man's wrist, and undergoing cystic degeneration. This case proved that the fluid from a fibro-cystic uterine tumor does not always rapidly coagulate on exposure to the atmosphere. Again, on the 20th of December, 1878, I was consulted by a gentleman, aged forty-nine, from Raleigh, N. C., who had been suffering for some months from apparently simple ascites or hydro-peritoneum. Remedies made no impression on the disease; and, from frequently getting out of bed at night and sitting up to relieve, in some degree, urgent dyspnea, he contracted a croupous pneumonia which involved the entire right lung, which is twice as fatal as pneumonia of the left. Dyspnea became so alarming that, on the 3d of January succeeding, assisted by Prof. George W. Miltenberger, I tapped the abdomen. The ordinary trocars used in this little operation were too short to penetrate entirely through the abdominal wall, and I used an aspirating tube which entered four inches and a quarter before the lemon-yellow fluid began to flow. It soon began to coagulate, and the clot formed was nearly as large, in proportion to quantity, as occurs in venesection. Perhaps there was a chronic diffuse peritonitis, which sometimes arises in the course of old-standing ascites, particularly if the latter be dependent on stasis in the portal vein, and more especially when an atrophic nutmeg liver is developed as a result of the stasis,[1] as was altogether probable in the case in question. In ordinary simple ascites there is generally some spontaneous coagulation, but nothing like what took place in this case, which proved that there is another fluid removed from the abdominal cavity, other than uterine fibro-cystic fluid, which speedily coagulates on atmospheric exposure. Thus, to resume: An analysis of these three cases proves (1) that

[1] Bauer, in *Ziemssen's Cyc.*, vol. viii, p. 296.

the fluid from a fibro-cystic uterine tumor does not always rapidly coagulate on exposure to the atmosphere; (2) that fluid simply from the abdominal cavity may rapidly coagulate on atmospheric exposure; and (3) that fluid removed from an abdominal cyst, not a fibro-uterine cyst, may do so likewise.

After the cyst was aspirated the patient seemed to do well until the third day, when she had a chill and rapid rise of fever, and all the signs and symptoms of acute peritonitis quickly supervened. On the seventh day she died, and, at my request, the *autopsy* was kindly made by my colleague, Dr. I. E. Atkinson, professor of pathology in the University of Maryland:

"Body emaciated and of medium size. A tumor-like prominence was visible in the epigastric and umbilical regions. The presence of fluid was not evident to palpation. Upon opening the abdominal cavity, a mass as large as a child's head at term presented at the opening. This proved to be composed of omentum, transverse colon, and small intestines bound together and made smooth and continuous by inflammatory exudation. As the masses of lymph were gently separated, the thickened and inflamed peritoneum was seen to be everywhere invaded by fine miliary tubercles. Recently formed visceral peritoneal adhesions were found throughout the abdominal cavity, and tubercle was sprinkled over both parietal and visceral surfaces. There was but little fluid in the abdominal cavity of a pale straw-color. There was no sign of ovarian or uterine disease. There was some tubercular ulceration in the small intestine. The other abdominal organs remained unaffected.

"Upon opening the thorax, a large quantity of clear serum, of the color of brown sherry, escaped from the left pleural cavity. Both costal and visceral pleuræ were invaded by scattered miliary gray tubercles. The pericardial sac also contained some fluid of a straw color, and had a few miliary tubercles on its surface toward the base. In both lungs were scattered miliary gray tubercles, but no softening or caseation."

It is thus seen that this was a case of encysted tubercular peritonitis, which presented the characteristic phenomena of a uniocular ovarian or parovarian cyst. The small amount of fluid found is obviously accounted for by the recent attack of adhesive peritonitis, which nearly obliterated the tubercular cyst, and by the large amount drawn off by aspiration.

Now, it may well be asked, As you correctly reasoned out what the case was not, why did you not reason out what it was? The answer is near at hand. I was so engrossed with the phenomena before me that I strangely failed to remember the clinical history recorded by my intelligent chief of clinic, Dr. Chunn, and to attach due importance to commemorative events. We all know how prone we are not to give great weight to the past observations of others when they are in complete and obvious contrast with what we immediately observe ourselves. The history of the case evinced the presence of a fluid evidently free in the peritoneal cavity when the patient first presented herself to Dr. Chunn; and when I saw her, about seven weeks later, there was obviously fluid imprisoned in an abdominal cyst. Now, this was evidently the result of a simple or tubercular peritonitis, or else cancer of the peritoneum. And, as the latter would, in all probability, be excluded by the absence of its concomitant circumstances, the diagnosis would be narrowed down to the two former. But, as tubercular peritonitis is usually associated with a tuberculous process distributed throughout the body, and notably in the lungs, the presence of pleurisy in my case ought to have been strikingly significant; and, by the familiar process of exclusion, a simple inflammatory cyst ought to have been rejected and a tubercular peritonitic cyst accepted. This is the important lesson which my case teaches. But, if I failed to read it aright, while I have no disposition to dodge behind the ample shield of great names, it is some consolation to know that some of the ablest and most experienced gynecological diagnosticians have failed likewise, as will presently appear.

The literature of encysted tubercular peritonitis, simulat-

ing ovarian cysts, is very scanty. No illustrative cases are given in our standard gynecological works; indeed, the subject does not seem to have received even the cold respect of a passing recognition. Nor in works on the general practice of medicine, save in a perfunctory and dimly shadowed way of no practical utility, unless the following, cited by Bauer,[1] be a slight exception:

"In Kaulick's work a case is recorded in which the partial sacculation of fluid by means of firm membranes produced phenomena which gave rise to a similarity to an ovarian cyst."

In works consecrated to diseases of the ovaries and ovariotomy we do not find much on the subject in hand. In his great work, Peaslee[2] simply says: "Acute tubercular peritonitis may simulate an ovarian or other form of abdominal tumor." Sir Spencer Wells enlightens us with a single illustrative case. Called, in 1862, to see an unmarried lady, aged twenty-two, whose abdomen was as large as that of a woman near the full term of pregnancy, and filled with free fluid, which gravitated to the lowest point with all changes of position, and looking at her appearance and to the fact that she had occasional pain, he diagnosticated a subacute form of tubercular peritonitis. Some months afterward, however, a remarkable change had taken place. The abdomen was much more prominent and arched than before; it was dull in all positions of the body, and clear in both flanks as she lay on her back; fluctuation was evident in all directions; and, on taking a deep inspiration, a cyst appeared to move downward from the epigastrium beneath the parietes. He now doubted the accuracy of his first opinion, and she was tapped. Seven days later he became rather impressed with the belief that he was dealing with a thin, non-adherent, unilocular ovarian cyst, and made an exploratory incision. No cyst appeared, but a large quantity of opalescent fluid escaped, and the whole of the peritoneum was seen to be studded with myriads

[1] *Op. cit.*, p. 336. [2] *Op. cit.*, p. 165.

of tubercles.[1] So that, although he had the advantage of a personal examination when the diagnosis of an abdominal cyst was clearly out of the question, and sagaciously made a correct diagnosis, subsequently, when the conditions were radically changed, he doubted its accuracy, and thought he had before him an ovarian cyst. But the most remarkable part of the history of this lucky lady remains to be told. She got well, married, and, in 1884—twenty-two years afterward —was still well!

Mr. Lawson Tait states that his book on *Diseases of the Ovaries* includes all the conditions which simulate ovarian tumors that have occurred in his practice; and I find no account of tubercular peritonitic cysts simulating ovarian cysts among them.

But Dr. Atlee has reported[2] three cases of tubercular peritonitis which produced conditions similar to those characteristic of unilocular ovarian cysts, aged ten, twenty-nine, and forty-nine years. All were fatal, and not one seems to have been correctly diagnosticated before death. All were tapped, and in all the fluid, in that respect like ovarian fluid, "firmly coagulated by heat," but not, as in my case, rapidly on exposure to the atmosphere.

In journalistic literature I have met with only two cases. One, Maggie C., black, aged twelve years, reported[3] by our distinguished Fellow, Dr. Samuel C. Busey, "as a case of tuberculosis of the peritoneum, with the formation of a sac simulating an ovarian cyst." The author says:

"During the examination at the time of admission the possibility of the presence of an ovarian cyst was considered, but was excluded by the facts elicited at the time. A few days' observation and examination of the pulse-rate and temperature chart confirmed the diagnosis of tubercular peritonitis. The probability of the formation of a cyst in cases of tubercular peritonitis simulating ovarian dropsy is very remote. I have

[1] *Op. cit.*, p. 20, and *Ovarian and Uterine Tumors*, London, 1882, p. 100.
[2] *Op. cit.*, pp. 72, 73, and 78.
[3] *Gaillard's Med. Jour.*, May, 1880.

not examined the literature of the subject, and can only refer to the one case observed by Kaulick."

The other case has been recently reported by Prof. William Gardner, M. D., of Montreal.[1] This was an unmarried domestic servant, aged twenty-three, who admitted a pregnancy, terminating at six or seven months, a year and a half previous. The abdominal enlargement had only been noticed three or four months previous. Her general health had declined, and she was emaciated:

"*Examination.*—Well-marked fluctuation over the whole of the anterior and antero-lateral aspects of the abdomen. Dullness on percussion over the same area. In the lumbar region (flanks) and epigastrium the bowel note present. No firm or solid part to be felt anywhere. The anterior aspect of the abdomen quite uniform. The uterus, measuring two inches, pressed upward and forward, lay immediately behind the pubes. The patient was admitted to the Montreal General Hospital and kept under observation for a few days, when it was found that she had fever of septic type, the temperature at times running very high, with profuse sweating and occasional attacks of vomiting. During this interval she was seen by Drs. Fenwick, Ross, Roddick, Shepherd, and J. C. Cameron, who concurred in my diagnosis of suppurating ovarian cyst. Another symptom—red blush and edema of the central anterior part of the abdominal wall—seemed to support the view. Operation: The ordinary incision for ovariotomy was made, but, on reaching the peritoneum, no separation of parietal from visceral layer could be made; the knife entered the collection of fluid, passing through what seemed to be a thickened, closely adherent cyst-wall.

"Drainage was practiced in this case, and irrigations of carbolized water, then corrosive sublimate solutions, and finally solutions of iodine, were used. But death occurred from exhaustion six weeks after the operation. The *autopsy* revealed the anterior peritoneal cavity converted into a suppurating cyst, extending from the liver into the true pelvis, which was

[1] *Canada Med. and Surg. Jour.*, June, 1885.

nearly filled by the mass, and which consisted of all the intestines, except the transverse colon, closely matted together by recent adhesions and studded with miliary tubercles. The lungs were universally adherent, and studded with gray granulations."

Prof. Gardner states that a similar case occurred some years ago in the practice of his colleague, Dr. Fenwick, in which the same error of diagnosis was made by all who saw it, and that the patient died some months after operation.

I have endeavored to present a fair statement of the meager literature of this subject as I have found it. It can scarcely be said that a correct diagnosis was made in any of the eight cases previous to death; for if, at first, Sir Spencer Wells made a correct diagnosis of a subacute form of tubercular peritonitis, he subsequently doubted its accuracy, and inclined to believe that he had in hand a thin, non-adherent, unilocular ovarian cyst, and operated for it. Dr. Busey certainly, in his case, made a correct diagnosis of the tubercular process invading the peritoneum and the lungs, and excluded the presence of an ovarian cyst; indeed, he even believed "that the walls of the sac or abscess were formed in front by the parietal peritoneum and posteriorly by the agglutinated intestines"; still, from his stating that the formation of a cyst in tubercular peritonitis, simulating ovarian dropsy, is very remote, and his reference to the one case observed by Kaulick, in which there was a partial sacculation of fluid presenting a similarity to an ovarian cyst, I infer that Dr. Busey did not recognize before death that the sac was caused by tuberculosis of the peritoneum. It does not appear that Dr. Atlee recognized the true character of any one of his three cases before death; and Drs. Gardner and Fenwick completely failed in the diagnosis of their cases. As for my own case, if I did not make a mistake in diagnosis, it was only because I made no diagnosis at all; for it is certain that I did not even suspect its true character.

The cases adduced are too few to formulate any absolute rules for guidance in diagnosis; still, if they are scanned a little closely, they furnish some lessons not wholly destitute of clinical value.

1. As regards *age.* Of seven cases in which this was noted, the ages were ten, twelve, twenty-two, twenty-three, twenty-four, twenty-nine, and forty-nine years. So that all were under thirty except one, and, of the six others, all but one were under twenty-five years. And this is in accordance with the etiology of tubercular peritonitis when unaccompanied by the formation of cysts that simulate ovarian or other forms of abdominal cysts. Thus Loomis says:[1] "Tubercular peritonitis is met with most frequently in early life." And Bauer says:[2] "In the later periods of life tubercular peritonitis rarely occurs." It is clear, then, that *age* is an important element of diagnosis in the cases in question.

2. *Rate of growth.* In all the cases under consideration, as far as can be ascertained, this was rapid, and varied from six weeks to eight months; indeed, only one seems to have reached the latter limit. In Dr. Atlee's cases, from the beginning until they presented the characteristics of an ovarian cyst, in one case less than three months had elapsed, in another about six weeks, and in the third only a short time, as the patient had been suffering from acute pain in the abdomen, followed by sudden enlargement from an accumulation of fluid. In my case only three and a half months had passed, and in Prof. Gardner's three or four, when they offered the conditions pertaining to unilocular ovarian cysts. Certainly, then, rapidity of development specially characterizes the formation of tubercular peritonitic cysts.

3. As tubercular peritonitis is only in very rare instances a local affection, we should look for the evidences of the tuberculous process in other parts of the body, and especially note the temperature variations, which were markedly emphasized in Dr. Busey's and Dr. Gardner's cases.

4. And lastly. Prof. Gardner noticed "*red blush and*

[1] *Practical Medicine*, p. 325. [2] *Op. cit.*, p. 325.

*edema of the central anterior part of the abdominal wall*" in his case, and says that it seemed to support his diagnosis of suppurating ovarian cysts. Dr. Loomis, on the other hand, states that "redness and edema about the umbilicus are regarded as *characteristic of tubercular peritonitis*." And Bauer also says:

"Among the changes in the abdominal parietes which may be observed, considerable stress has been repeatedly laid on the *inflammatory redness and edema which are sometimes developed in the neighborhood of the umbilicus* in the course of tuberculosis of the peritoneum. Vallin has particularly urged the importance of this symptom in peritoneal tuberculosis."

And in a remarkable paper *On Suppurating Ovarian Cysts*, by Dr. Thomas Keith,[1] I find no mention of the symptom in question in any of his cases, although full histories are given of seven acute cases of the ten on which he operated.

The important question now arises: *When a correct diagnosis is made of tubercular peritonitic cysts, that simulate ovarian cysts*, how are they to be treated? Sir Spencer Wells's case was twice tapped, then was incised as in ovariotomy, and recovered. Dr. Atlee tapped all of his three cases, and all died. Drs. Gardner and Fenwick operated on their cases as in ovariotomy, and both died; and I aspirated my case with a fatal result. Thus, of six cases treated by operative interference, five died—a deplorable exhibition. Hence, it may well be asked, Would not a rational therapeutical and hygienical management promise better results? Dr. Busey's case was under care from August 8, 1879, till November 5th succeeding. It was regarded as hopeless from the date of admission; and yet, under his skillful treatment, which consisted in rest, a nutritious and easily digested diet, tonics,

[1] *Edinburgh Med. Jour.*, February, 1875. This great surgeon says: "Of the ten more or less acute cases operated on, eight recovered, while the two chronic cases got well easily." I do not know that any one has equaled this wonderful success in the removal of suppurating ovarian cysts.

cod-liver oil, the syrup of iodide of iron, and iodide of potassium, a marked diuresis ensued, which relieved the distention from fluid accumulation in the abdominal cavity. And Dr. McCall Anderson, Professor of Clinical Medicine in the University of Glasgow, has published[1] three cases illustrative of the curability of tubercular peritonitis, the diagnosis of which seems to have been justified by their clinical histories:

Case I.—Helen G., aged ten years, was admitted into the hospital complaining of swelling of the abdomen of three months' duration, and occasional pains in the epigastrium. Has never had much cough; temperature is usually from 99° to 100° Fahr., pulse 104, and respiration 36; tongue slightly furred, appetite fair, bowels loose; there is evidently free fluid in the peritoneal cavity in considerable quantity; the circumference at the umbilicus is twenty-six inches. Heart and kidneys healthy, and there is no evidence of liver disease or of portal obstruction. The fluid in the peritoneal sac evidently results from peritonitis of a tubercular nature, for these reasons: 1. The girl's brother died of "decline of the bowels." 2. She is only ten years of age—a time of life when tubercle of the peritoneum is common. 3. She has a slight, dry cough, dullness on percussion at the left apex, and, in the same situation, wavy respiration, with a snoring râle. Under a careful regulation of the diet and bowels, and anti-tuberculous treatment (cod-liver oil and syrup of iodide of iron), toward the end of the month not a trace of fluid could be discovered in the peritoneal cavity, all pain had disappeared, and she was dismissed well, excepting slight dullness at the apex of the left lung.

Case II.—A lad, aged twelve years, had a most violent attack of tubercular peritonitis; family strongly scrofulous; father is dying of strumous cervical adenitis; his mother has phthisis, and also two of his brothers; and a brother died of tubercular disease of the bowels. The lad's disease began with pain in the hypogastric region, attended by high fever, great emaciation, diarrhea, vomiting, but without serous effu-

[1] London *Lancet*, March 3, 1877, p. 303.

sion in the peritoneal cavity. During his illness of five weeks an abscess formed in the neck, and discharged about a cupful of pus. His case appeared nearly hopeless, but he was assiduously nursed, fed, and stimulated; iced cloths were applied to the abdomen for half an hour every second hour, and opium was given in full doses (a quarter- to a half-grain every four hours), with a grain of quinine in each dose. At the date of report he was sitting up in his arm-chair, cheerful and well, although weak and thin.

Case III.—This was a little girl, with symptoms very similar to those of the first patient, with fluid in the peritoneal cavity and consolidation of one apex. She was treated with cod-liver oil and syrup of iodide of iron, and a large quantity of fluid was twice removed by tapping, which the microscope showed to be inflammatory exudation. She made a perfect recovery."

Prof. Anderson says to his students in regard to cases of tubercular peritonitis: "I would have you enter upon their treatment with a hope that your efforts may be crowned with success, *especially where the inflammation is accompanied by fluid effusion*." And this is all the more encouraging when we consider the language of Prof. Alfred Loomis, of New York city, one of the most acute and accurate auscultators of which any country can boast, in respect of chronic pulmonary phthisis:[1] "Recovery has occurred in one sixth of my recorded cases during the past ten years." Let all this be well pondered before the restless surgery of our day, always impatient to try its hand, essays operative interference in tubercular peritonitic cysts.

Having detained the Society so long with the history and discussion of one case, it is with reluctance that I refer to another. But, as a whole, it is so extremely rare, interesting, and important, that I can not forbear the temptation to bring it before you.

Case II.—Frances R., aged twenty-four, was admitted to the Hospital for the Women of Maryland, July 10, 1883. She

[1] *Op. cit.*, p. 197.

seemed to belong to the white race, from her fair, white skin, long, straight, auburn hair, and somewhat ruddy cheeks. But it was subsequently ascertained, from the visits of her associates, that she claimed to be of the colored race. She had been married only one year, and had never been pregnant. Her general health was good in every respect; bowels regular, appetite excellent, uterine functions normal, and there was no evidence of cardiac or renal trouble. She complained only of the immense weight she had to carry, and from which she desired to be freed.

The abdomen measured: from ensiform cartilage to umbilicus, 10½ inches; from umbilicus to symphysis pubis, 9½ inches; from umbilicus to right anterior superior spinous process of ilium, 12 inches; from umbilicus to left anterior superior spinous process of ilium, 12½ inches; circumference at umbilicus, 46½ inches; circumference below umbilicus, 47 inches.

Examined *per vaginam*, the uterus seemed pressed forward by a large sac containing fluid, and the sound entered two and a half inches. Over the abdomen everywhere there were developed the physical signs of a large unilocular sac. The woman stated that she commenced enlarging between seven and eight years before, and that the increase of size had been very gradual and free from notable pain or uneasiness, save what seemed due to a sense of weight, fullness, and distention. Now, what was it?

1. Was it *ascites*, as a physician of large experience, who was present, supposed, from the superficial wave responding to palpation, the umbilicus retaining its normal position an inch nearer to the pubes than the sternum, and its normal depression effaced, while the intestines, anchored to the mesentery, could not float to the top of the liquid and elicit resonance in front? This view was quickly dismissed. Uncomplicated ascites is the result of intra-abdominal disease, and, in an immense majority of cases, of cirrhosis of the liver. This is the legitimate offspring of alcoholic excesses, betokened by its long train of broken health and usually thin-visaged aspect. In this case the conditions were all

wanting, to say nothing of its protracted duration and steady march, never once relieved in its course by the trocar.

2. Was it a large *unilocular ovarian cyst?* It is well known that multilocular ovarian cysts develop more rapidly than unilocular; and it may be safely stated, after Peaslee, that, as a rule, the former demand surgical relief within a year, and the latter within eighteen months or two years from the time they are first recognized by the patient, which usually occurs when the cystoma is approaching the level of the umbilicus, or about the size of the uterus at the end of four and a half to five months of gestation. So that when a woman tells us that she has observed a well-marked abdominal enlargement for between seven and eight years, which, upon examination, is evidently a cystoma, that fact alone is strong *prima facie* evidence against its being of ovarian origin. Indeed, before three years have elapsed, women are usually greatly exhausted, and the features are characteristically chiseled by anxiety, apprehension, and suffering, so as to present, even to superficial observation, the model *facies ovariana*. The exceptions are certainly not numerous, still they do occur. Thus, on the 29th of August, 1870, I was consulted by Mrs. A. E. H., aged thirty-four, a widow with two children. In regard to the diagnosis, I wrote her physician as follows:

"I find the uterus completely retroflexed, somewhat enlarged, with marked cervical metritis, and uterine catarrh involving the entire uterine canal. The malposition of the uterus is caused by the tumor. This tumor is, I suspect, of ovarian origin. It may be, however, a large extra-uterine fibroid pressing the uterus backward. Time will show."

And time did show. This patient consulted me again on the 15th of May, 1883. She stated that after her visit to me her abdomen gradually enlarged for about eight years, and was so immense that she could not walk about, and that she had great difficulty in breathing. Then, after a sensation of something bursting inside the abdomen, soon followed by

severe intra-abdominal pain and a protracted illness, the swelling subsided almost entirely. For a long time there was no evidence of swelling up again; then, but very gradually, the abdomen began to enlarge until the present time. She was now greatly distended, presented the typical *facies ovariana*, had lost her appetite completely, and could only retain a little lime-water and milk, from long-standing gastric irritability. On the 26th of May I operated for ovariotomy at the Union Protestant Infirmary, assisted by Drs. Charles H. Riley, Charles O'Donovan, Jr., and Robert T. Wilson. There were strong and numerous adhesions in every direction, and I removed a large multilocular ovarian cyst. She succumbed on the fourth day from exhaustion, not having been able to retain any kind of nourishment on her stomach, and sustained only by rectal food. Now, here was a case of a multilocular ovarian cyst which burst, and nearly proved fatal, about eight years after I had diagnosticated an ovarian cystoma, and which I removed nearly five years after that accident occurred. And in a clinical lecture our distinguished Fellow, Dr. T. Gaillard Thomas, makes the following statement:[1]

"Three months ago I operated at the Woman's Hospital for a tumor which Dr. Sims had twenty-four years ago declared to be an ovarian tumor of the size of a cocoanut. When I removed it it weighed sixty pounds, and the woman got perfectly well after the operation. This tumor had unquestionably been growing for at least twenty-four years. . . . I have frequently removed such tumors after they have been growing for nine or ten years."

As ovarian cystomata are not remarkable for either dormancy or sluggishness of growth, Dr. Thomas's experience seems to have been somewhat unique, if he was reported correctly. But the testimony of so accurate and experienced a gynecologist as to the fact that ovarian cystomata *may* prolong, by some years, the regular normal periods of their

[1] *New York Med. Jour.*, vol. xxxix, p. 88.

growth is not to be ignored in a case of doubtful differential diagnosis. So that the fact that the case in hand had existed for between seven and eight years did not, of necessity, preclude the possibility of its being an ovarian cystoma. Nor did the apparent unimpairment of the general health of necessity exclude it; for Lawson Tait[1] assures us: "The largest ovarian tumor which I have removed, somewhere over one hundred pounds in weight, gave rise to no other symptoms than the inability of the patient to get about from its immense weight."

3. Was it a *parovarian cyst?* The patient was young, the affection had existed between seven and eight years with the general health unimpaired, fluctuation was superficial and distinct in every diameter of the cystoma, the walls seemed very thin, and it did not seem filled to repletion; indeed, one could not help thinking that the cyst could easily contain three or four quarts more of fluid. All this appeared to be much more in unison with the clinical history of a parovarian than an ovarian cyst. But there was one phenomenon which did not harmonize with the usual behavior of a parovarian cyst. Although the cystoma seemed to fill the abdominal cavity and was quite flaccid, it could not be compressed down near the level of the umbilicus. In this respect, it more closely resembled an ovarian cyst, which is usually tense and can not be compressed like a parovarian cyst, as has been already stated in another connection. But ovarian cysts are not always tense. On the 9th of January, 1885, I operated for ovariotomy on Mrs. A. E. P., white, from North Carolina, at the Hospital for the Women of Maryland. She was twenty-seven years old, married, had two children; no miscarriages. Her last child was born eight months before. She had noticed that her abdomen was enlarging for the past twenty-two months; that is, five months before the beginning of her last pregnancy. The tumor had grown very slowly, and was not then at all tense; indeed, it rather presented the appearance of ascites than an

[1] *Op. cit.*, p. 191.

ovarian cyst. She had never been tapped. The uterus was retroverted, and the sound entered three inches. I was assisted in the operation by the house staff—Drs. Charles H. Riley, Charles O'Donovan, Jr., W. P. Chunn, and R. T. Wilson. A large unilocular ovarian cyst was successfully removed, with unusually strong adhesions in front nearly up to the ensiform cartilage. But for these strong anterior adhesions, the cyst might easily have been compressed like a parovarian cyst. It is rather remarkable that this woman did not need ovariotomy for eight months after the termination of her pregnancy, the cystoma having been large enough to attract her attention five months before she became pregnant. But Dr. Keith states, in his paper *On Suppurating Ovarian Cysts* that in one of his cases a large ovarian cyst had existed with at least two of her pregnancies.

4. *Was it a fibro-cystic tumor of the uterus?* Although Lawson Tait affirms that a differential diagnosis of a fibro-cystic tumor is such a very difficult thing, "that it is possible only in the hands of a surgeon who has made two or three previous mistakes," yet in the case in hand, as it seems to me, one would incur small risk of mistake in excluding it. Dr. McGuire's case, already mentioned, is the only one on record, so far as I know, at the early age of twenty-four years; and its clinical history was widely variant from that in this case. Moreover, in all the fibro-cystic tumors of the uterus that I have seen, the cyst was remarkably tense, while in the case under review the cyst was quite flaccid.

5. Was it a case of *tubercular cyst*, or one of a simple *encysted peritonitis?* The history and commemorative events excluded both. Only a short time before, I had seen a case of the latter in the service of my friend and colleague, Prof. S. C. Chew, in the wards of the Maryland University Hospital, of which he has kindly furnished me the following account:

"Mrs. X., about fifty-five years of age. A uniform fluctuating tumor occupied the whole of the abdominal region, giving a dull sound on percussion, both in the flanks and in the

center. She stated that it had commenced as a tumor in the right ovarian region, and had gradually extended over the abdomen. An examination *per vaginam* proved that the tumor did not project into the pelvis. Dyspnea being urgent, she was tapped, and a large bucketful of straw-colored fluid was drawn off. This was followed by great relief, so that she was able to walk about the ward. In about two weeks the distention was again very great, when she was tapped again by the resident physician, Dr. Frank West, but without relief, and in a few days she died. On *post-mortem* examination there were the signs of a diffused peritonitis, coagulated lymph overspreading the intestines and the abdominal wall."

In this case diagnosis was not difficult. Vaginal touch excluded ovarian and fibro-uterine cysts, and the physical signs elicited by palpation excluded ascites. And as a tubercular peritonitic cyst could not be admitted, and the history rejected a renal cyst, which I have once seen mistaken for an ovarian cyst, so-called encysted dropsy of the peritoneum almost of necessity followed as the diagnosis by exclusion, as the result verified.

Returning to the case under review, it will be seen that I have rejected all the affections considered excepting ovarian and parovarian cysts. With the evidence before me, I could not decide between the two; and it will be presently seen that my hesitation was, perhaps, not injudicious.

I have not referred hitherto to the microscope as an instrument *ex fumo dare lucem.* The reason is that, while I do not doubt that in the hands of such able and experienced experts as Drs. Garrigues and Drysdale, whose memorable discussion is fresh in the minds of us all, the microscope will often elucidate and render positive a doubtful diagnosis when used in connection with the character of the fluid, the clinical history and physical examination of patients, yet, in the hands of the average microscopist, it is misleading and untrustworthy.

Let us now see what was the result of the operation, which was done on the 13th of July—the third day after the

patient's admission into the hospital. I was assisted by the house staff, Dr. Riley acting as my chief assistant; and there were present, also, our worthy Fellow, Dr. B. B. Browne, and Drs. James Carey Thomas, L. Ernest Neale, J. H. Patterson, and W. E. Moseley, who kindly gave the ether. Our eminent Fellow, and my colleague in the hospital, Dr. H. P. C. Wilson, did not arrive until the operation was far advanced. I stated that I intended to make only an exploratory incision to clear up the diagnosis, which I declined to announce, and to be governed by circumstances. All the usual antiseptic precautions were adopted, of course. I made an incision, about two inches long, in the median line, below the umbilicus. When I had cut down to what seemed to be the sac, which did not present the lovely pearl-like conjunctival blue of most ovarian cysts, I found the peritoneum very much thickened—to apparently about one eighth of an inch—and closely adherent to the cyst. I separated the peritoneum, for about two inches around the line of incision, from the cyst, which then seemed to be ovarian, and introduced the trocar. About forty pints of a slightly viscid, greenish fluid escaped, which contained many flakes of fibrin, and I then extended the incision in the *linea alba* for about three inches, and endeavored to enucleate the cyst. The peritoneum was separated from the cyst for about five inches in every direction, and, as the adhesions seemed interminable, I made an incision in the cyst to the extent of that in the *linea alba*. When all the fluid was removed, I looked into an immense unilocular cyst, which seemed to occupy the entire abdominal cavity and to be tightly stretched over the spinal column, and even the pelvic brim down nearly to the ilio-pectineal line. It appeared as if all the intra-abdominal organs had been removed, excepting that there were no signs of where they had been attached. On the right side the peritoneum was removed from the cyst so far that a small portion of intestine became visible, apparently the right arch of the transverse colon.

Concluding that it would be impossible to enucleate the

entire cyst, I removed a few inches of it, which seemed redundant, closed the incision along the *linea alba* with silver sutures, and inserted a large drainage-tube. The patient rallied well from the operation, but, after twenty-four hours, peritonitis set in, and she died on the third day. I requested two competent young physicians to make the *autopsy*, at which I could not be present, as I was then in attendance upon an obstetrical case, the labor not being terminated.

And now, with the exception of the poor woman's death, comes the saddest part of all. The weather was hot, and my young friends—prepossessed with the idea, which one of them had suggested during the operation, that the case was one of encysted dropsy of the peritoneum—contented themselves with demonstrating only what had been revealed at the operation! The pelvic viscera were not examined at all! So that we can only reason about the true nature of the case.

Dr. Bantock affirms "that there is no such thing as a true unilocular or *unifollicular* disease of the ovary except in its early stages," and "that the true ovarian tumor, of size sufficient to be diagnosed during life, is always multiple." And Lawson Tait affirms: "The result of all my observations has been that, in every unilocular tumor, I have found the ovary unaffected, though on several occasions I have seen it stretched over the cyst-wall."

Now, if these eminent surgeons are correct in their views, the case in question was a parovarian cyst. Not that all parovarian cysts are unilocular, exceptionally, as has been proved by Thornton, Gillette, Ledegauck, Olshauser, and Atthill; they may be binocular, or even multilocular; but these are not so rare as a unilocular ovarian cyst.[1]

But the walls of parovarian cysts are almost always very thin, and the fluid limpid and opalescent, while in this case the cyst-wall was at least an eighth of an inch thick and of almost leathery consistency, and the fluid distinctly viscid and greenish. In regard to the character of the fluid, how-

[1] Goodell, *Trans. Amer. Gyn. Soc.*, vol. vi, p. 231.

ever, in parovarian cysts, Lawson Tait declares that, while it is "often limpid," yet this "is by no means always the case, for I have removed many parovarian cysts which contained thick, gelatinous, grumous, or bloody fluid." And Dr. Garrigues states,[1] in writing of parovarian cysts: "This fluid was so like that found in two cases of ovarian cysts with watery fluid that it would be impossible to base any differential diagnosis between cysts of the broad ligament and ovarian cysts on its properties."

It is obvious now why it was impossible to compress the flaccid cyst down near the level of the umbilicus. The strong adhesions effectually precluded that element of diagnosis, so generally available in parovarian cysts. But are parovarian cysts ever accompanied by strong adhesions? Dr. Montgomery, of Philadelphia, has recently reported[2] an instance in which a parovarian cyst was universally adherent.

I have met with only one case that resembled the one in question very closely, and I regret that it has no clinical history:

"A few years ago I opened the body of an elderly woman who died with an immense collection of water in the abdomen. The fluid amounted to many gallons, and, after it had been removed, I continued the incision from the sternum to the pubis; and when I had finished the incision and, with the medical friend (Dr. Bond) who was with me, looked into the cavity, we were both for some time very much astonished to behold only a smooth mucous-serous surface in the cavity, and looked for some time in vain to find any liver, or stomach, or alimentary canal. It seemed that we were examining an abdomen from which all the viscera had been carefully removed. I was greatly astonished, and quite at a loss what to think of the case, or imagine what had become of the abdominal viscera, since the line of the spinal column was strongly drawn at the back of the great cavity we were inspecting, and we seemed to look quite up into the empty concave of the diaphragm. At

[1] *Trans. Amer. Gyn. Soc.*, vol. vi, p. 60.

[2] *Medical News*, September 19, 1885, p. 330.

length, in examining the cut edge of the incision, I saw that we were looking into an empty cyst, whose edge was there to be seen, and the outer superficies of which was adherent to the peritoneum. The cyst adhered pretty firmly everywhere, but was cleavable. I detached it completely, discovering the atrophied organs behind and below it firmly compressed against the back part of the abdomen. I have no doubt this cyst held more than a thousand ounces of serum; probably twelve hundred. There was, at the lower part of it, a small solid or hardened portion, which was the altered remnant of the left ovary, all the rest of the cyst having been developed out of that body. I gave the specimen to Dr. Horner, who preserves it still, I believe, in the museum of the University of Pennsylvania. It was the largest single cyst I ever met with."[1]

It will be seen at once how strikingly Dr. Meigs's case resembles my case; indeed, his description equally applies to mine, in so far as I have been able to give it. If he was correct in stating that the cyst in his case was developed out of the remnant of the left ovary, it was, of course, an ovarian cyst. But may it not have been, according to Bantock's view, a cyst originating in one of the tubules of the parovary, which grew toward or involved the ovary, separating the layers of the peritoneal fold in which it lay imbedded?[2] The walls of parovarian cysts are not always thin. Lawson Tait says:[3] "I have removed a parovarian cyst with walls more than half an inch thick, the greater part of which was composed of fusiform muscular cells."

Gentlemen, I have already detained you much longer than I intended. I thank you heartily for the courtesy and patience which you have manifested in listening to my discourse, as well as for the high honor your too partial suffrages have conferred upon me in electing me to preside over the tenth annual meeting of our beloved Society.

If there be in American medicine anything that is dis-

[1] *Woman: her Diseases and Remedies*, by Charles D. Meigs, M. D., fourth ed., p. 354.

[2] *Trans. Obstet. Soc.*, London, vol. xv. [3] *Op. cit.*, p. 169.

tinctive, it is its gynecology; and I deem it not inappropriate, in this our first meeting in the national capital, to make a brief allusion to the peerless father of American gynecology—J. Marion Sims. It was in this city he hoped to pass his declining years. He had already made the purchase of a house here for that purpose; and only six days before his sudden demise he wrote me: "I feel very well satisfied with the idea of getting a home for my old age in Washington." Of world-wide fame, it would have been meet that in this beautiful city, the capital of his country, his sun, having filled the earth with its rays, should have calmly sunk to rest. But Providence otherwise ordered it.

If all that Sims did for gynecological science, and all that has, in consequence of his achievements and discoveries, of necessity followed, should be suddenly blotted out, what an eclipse would suddenly come over our daily life-work and toils! Were I to attempt to speak of him, and the priceless boon he conferred on our science and art, I should feel oppressed by the emotions which thrilled the bosom of Bossuet when, with faltering words, he began his eloquent eulogy on a great warrior:

"At the moment I open my lips to celebrate the immortal glory of the Prince of Condé I find myself equally overwhelmed by the greatness of the theme and the needleness of the task. What part of the habitable world has not heard of his victories and the wonders of his life? Everywhere they are rehearsed. His own countrymen, in extolling them, can give no information even to the stranger. And although I may remind you of them, yet everything I could say would be anticipated by your thoughts, and I should suffer the reproach of falling far below them."